# CAST BRIEFING 38 - July 2025



**Strengthening climate policy through social science:** Co-developing behavioural indicators for climate action with the Welsh Government

### **Key messages:**

- Social science can help organisations measure the effectiveness of public engagement and behaviour change initiatives related to climate change.
- Focusing on specific, policy-relevant behaviours—and tracking them with consistent indicators—enables meaningful measurement of behaviour change and public engagement over time.
- Early collaboration with researchers and stakeholders leads to stronger survey design and more effective public engagement strategies.



CAST is a global hub for understanding the crucial role that people play in fighting climate change. The CAST team is based across five UK institutions, including the University of Bath (our centre hub), the University of Manchester, the University of East Anglia and Cardiff University, as well as the charity Climate Outreach.

# Introduction

This briefing is intended as a resource for policy makers and anyone interested in evaluating public engagement and behaviour change in the context of climate policy.

Social science can play a crucial role in supporting the net zero transition by helping governments and organisations understand and evaluate public engagement and behaviour change, yet they are often difficult to measure. This briefing sets out how behavioural science frameworks, consistent indicators, and early collaboration between researchers and policymakers can strengthen survey design and improve the evaluation of public engagement with climate change, drawing on recent work with the Welsh Government.

## The Critical Role of People and Societal Change

How do we assess progress on climate change? Measuring carbon dioxide emissions is one way, but there are other indicators of progress, many of which may be visible before we see any reduction in emissions.

One such indicator is societal change. Technological advances are essential, but they are not enough on their own. Net zero also requires societal change. Many of the most significant emissions reductions will come from changes in how people travel, eat, consume, and use energy. This means we need the public to be engaged with climate solutions and to make sustainable lifestyle choices. Without meaningful public engagement, the net zero transition risks being slow, unequal, or met with resistance.

It is crucial that we evaluate public engagement and behaviour, so we can assess whether climate policies and initiatives are working. But measuring these things can be tricky. Public engagement is not just about awareness; it's also about trust, motivation, and people feeling like they can take action and have a voice in shaping the transition.

There are existing surveys and trackers that provide insights into what people are thinking, feeling and doing about climate change. These include, for example, the <u>CAST survey</u>, the <u>Department for Energy Security and Net Zero's (DESNZ) Climate Change Public Attitudes</u>

<u>Tracker</u>, and the <u>Understanding Society study</u>. These tools provide valuable data that can inform policy. However, organisations—especially governments—may want more specific ways to assess the impact of their own climate change initiatives, strategies, and policies.

In this briefing, we provide recommendations, based on our work with the Welsh Government.

## Background

#### Welsh Government Context

The Welsh Government has developed a strategy to better engage the public around climate and nature – '<u>Climate Action Wales – Public Engagement Strategy 2023–26</u>'. It responds to key recommendations from the <u>Climate Change Committee</u> and aligns with Wales' <u>legal commitment to be net zero by 2050</u>. One key project rolled out under Wales' public engagement strategy is the <u>Climate Action Wales campaign</u>, which gives practical tips to help people make greener choices and shares inspiring stories of positive change.

To measure the effectiveness of its public engagement strategy, the Welsh Government developed a <u>Theory of Change</u> and launched a <u>Climate Change Perceptions and Actions Survey</u>. This tracks public understanding, attitudes, and behaviours across domains like transport, consumption, diet, and climate concern.

In 2024-2025, CAST worked with the Welsh Government's Knowledge and Analytical Services (KAS) team to review this survey. The review used a social science lens to offer recommendations on the best indicators to measure public engagement and behaviour change related to climate and environmental issues.

These recommendations can also be applied more broadly across the UK to support consistent, theory-driven, evidence-based approaches to policy-making.

Our review compared how far the Welsh Government's Climate Change Perceptions and Actions Survey aligns with the <u>COM-B model</u>. This is an established social science model that provides a template for behaviour change by identifying what factors need to shift—capability, opportunity, or motivation—and linking these to appropriate interventions and policies within broader systems.

#### The review involved:

- Conceptually aligning questions with the COM-B model.
- Conducting secondary data analyses of previous survey waves.
- Working iteratively with the Welsh Government through regular meetings and a dedicated workshop with policy teams.

## Background

#### The review successfully:

- Co-developed indicators that align with the climate policy frameworks of the Welsh Government and the COM-B theory.
- Evaluated and refined survey questions to improve measurement of public engagement and behaviour change for the Welsh Government.
- Helped build capacity among policy teams in applying the COM-B model.

## Recommendations

Here we provide broad recommendations and reflections for academic-policy partnerships that aim to support evidence-based policy making. (At this stage, specific findings relating to the Welsh Government survey are for internal government use only.)

- 1) Align survey design with 'behaviour change frameworks' for policy impact. Survey questions should be grounded in behavioural science frameworks, such as COM-B, to ensure consistency, analytical value, and direct relevance to policy goals. Designing surveys with a clear understanding of the insights required allows for more focused, actionable data that supports practical behaviour change and decision-making.
- 2) Clarify and define target behaviours. Surveys should focus on specific, policy-relevant behaviours. Using precise, repeatable indicators—tracked consistently over time—helps capture meaningful behaviour change.
- 3) Collaborate early to strengthen survey design and engagement strategies. Early collaboration between government, academia, and stakeholders ensures surveys and indicators are well-designed and aligned with policy needs. Embedding social science expertise within government teams can improve the quality of public engagement strategies and as well as supports effective data collection and analysis.

## Conclusion

This project highlights the value of academic-policy partnerships and provides a template for embedding social science expertise into policy development.

Academic-policy partnerships like this one offer access to academic social science expertise in research and data analysis methods; contribute to robust evidence; create opportunities to codesign practical tools that meet real policy needs; and facilitate knowledge exchange across devolved governments and research institutions.

These partnerships ensure that social science expertise is embedded where it can drive the greatest impact and help strengthen the capacity of policy teams to design evidence-informed strategies.

## Further reading

#### To read more about CAST's work on behaviour change and public engagement:

- Verfuerth, C., Demski, C., Capstick, S., Whitmarsh, L., & Poortinga, W. (2023). <u>A people-centred approach is needed to meet net zero goals</u>. *Journal of the British Academy*, 11(S4), 97-124.
- Zanin, B., Verfuerth, C., Demski, C., Cherry, C., Whitmarsh, L. & Powell, D. (2024). Five principles for good public engagement: How to get people involved in the climate conversation. <u>CAST Briefing 29</u>.
- Whitmarsh, L., Poortinga, W. & Capstick, S. (2021), 'Behaviour change to address climate change'. Current Opinion in Psychology, 42: 76–81.
   https://doi.org/10.1016/j.copsyc.2021.04.002

#### To read more about the COM-B model:

- Michie, S., van Stralen, M. M., & West, R. (2011): "The behaviour change wheel: A new method for characterising and designing behaviour change interventions"
- Guide for the COM-B Model of Behaviour

#### Suggested citation:

Verfuerth, C., Poortinga, W., Koenig-Lewis, N., Demski, C & Zanin, B. (2025). Strengthening climate policy through social science: Co-developing behavioural indicators for climate action with the Welsh Government. CAST Briefing 38. Available at: <a href="https://cast.ac.uk/wp-content/uploads/2025/07/the-centre-for-climate-change-and-social-transformations-cast-briefing-38-strengthening-climate-policy-through-social-science-co-developing-behavioural-indicators-for-climate-action-with-the-welsh-gov.pdf">https://cast.ac.uk/wp-content/uploads/2025/07/the-centre-for-climate-change-and-social-transformations-cast-briefing-38-strengthening-climate-policy-through-social-science-co-developing-behavioural-indicators-for-climate-action-with-the-welsh-gov.pdf</a>

# CAST is a global hub for understanding the crucial role that people play in fighting climate change.

We are a cross-institutional research centre with world-leading expertise in environmental psychology, behaviour change, public engagement, policy, governance, education, communications and more.

Underpinning CAST's research is a question of immense significance: how can we transform society in order to live better and address climate change?



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